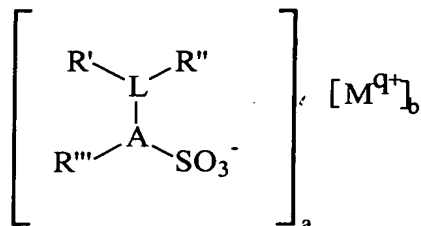


# IMPROVED ALKYL BENZENESULFONATES SURFACTANTS

## ABSTRACT OF THE DISCLOSURE

A surfactant composition comprising:

alkylarylsulfonate surfactant system comprising at least two isomers of the  
5 alkylarylsulfonate surfactant of the formula:



wherein:

L is an acyclic aliphatic hydrocarbyl of from 6 to 18 carbon atoms in total;

M is a cation or cation mixture and q is the valence thereof;

10 a and b are numbers selected such that said composition is electroneutral;

R' is selected from H and C<sub>1</sub> to C<sub>3</sub> alkyl;

R'' is selected from H and C<sub>1</sub> to C<sub>3</sub> alkyl;

R''' is selected from H and C<sub>1</sub> to C<sub>3</sub> alkyl;

15 any of R' and R'' is nonterminally attached to L and at least one of R' and R''  
is C<sub>1</sub> to C<sub>3</sub> alkyl; and

A is aryl; and

wherein:

said alkylarylsulfonate surfactant system comprises two or more isomers  
with respect to positions of attachment of R', R'' and A to L;

20 in at least about 60% of said composition, A is attached to L in the position  
which is selected from positions alpha- and beta- to either of the two  
terminal carbon atoms thereof; and

wherein further said alkylarylsulfonate surfactant system has at least one (preferably  
both) of the following properties:

25 said alkylarylsulfonate surfactant system has a ratio of nonquaternary to  
quaternary carbon atoms in L of at least about 10:1 by weight, when said  
quaternary carbon atoms are present; and

there is no more than 40% by weight loss as measured by Hardness  
Tolerance Test.

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